shown in FIG. 3 of the drawings. An electrical contact **115** is mounted on and carried by the disc **63** at its lower rim to engage electrically with a contact **117** mounted on the outside of the base **111** directly below the electrical contact **115**. A pair of electrical leads **119** and **120** are connected to the respective electrical contacts **115** and **117** for providing an electrical signal to the logic circuits **25**. The base **111** fits in a depressed portion **122** of the upper face **124** of the raised portion **16A** of the housing **16**, and a hole **124** in the depressed portion receives the lead wires **119** and **120** to enable them to be connected to the logic circuits **25**.

Considering now the logic circuit **25** in greater detail with reference to FIG. **6** of the drawings, an **8**-digit **4**-function, floating decimal point integrated circuit calculator chip **126** and a display driver integrated circuit chip **128** are mounted on a printed circuit board **131** within the raised portion **16A** of the housing **16** for providing the necessary calculator functions. A battery **133** is also mounted within the raised portion **16A** of the housing **16** for electrically energizing the logic circuits **25** and the display device **26**. The electrical energy is supplied to the circuits under the control of the on-off switch **29** which controls the making and breaking of a pair of electrical contacts **137** and **139** within the raised portion **16A** of the housing **16**.

The manner in which the logic circuits **25** operate and the manner in which they are connected are fully and completely described in a certain publication dated October, 1974 by National Semiconductor Corporation of Santa Clara, California. The calculator chip **126** may be a National Semiconductor chip identified as MM5737, the display driver integrated circuit chip **128** may be a National Semiconductor chip identified as DM8864, and the display device may be a National Semiconductor device identified as NSA198. The battery **133** is a 9 volt battery. The aforementioned publication dated October of 1974 may be obtained from National Semiconductor Corporation, 2900 Semiconductor Drive, Santa Clara, California 95051. The publication is entitled, "MM **5737** calculator-8-digit, 4-function, floating decimal point".

It should now be understood from the foregoing description that the calculator **10** of the present invention is adapted to be mounted on a conventional push button telephone and serves two different functions with the same device. In this regard, the calculator **10** serves as an enlarger for the push buttons on the telephone so that it becomes more convenient to use and to see. The calculator **10**, when the switch **29** is moved to the on position, serves as a calculator, and the same finger discs which are used for depressing the telephone push buttons may be used to generate information signals for the calculating logic circuits of the calculator. Thus, while someone is in the process of having a telephone conversation, calculations can be made with the calculator **10** without interfering with the operation of the telephone. Also, the calculator **10** may be used for performing mathematical calculations when the telephone is not in use. Similarly, it should also be understood that the finger discs of the calculator **10** may be used for initiating telephone calls without affecting the calculating logic circuits by having the switch **29** in its off position.

While the present invention has been described in connection with a particular embodiment thereof, it will be understood that many changes and modifications of this invention may be made by those skilled in the art without departing from the true spirit and scope thereof. For example, it will become apparent to those skilled in the art that additional smaller finger discs and associated switches may be employed when a larger number of functions are to be employed in connection with the logic circuits. Accordingly, the appended claims are intended to cover all such changes and modifications as fall within the true spirit and scope of the present invention.

What is claimed is:

1. A calculator adapted to be used with a push button telephone having an array of telephone push buttons, said calculator comprising:

a cup-shaped housing having an opened mouth adapted to fit over the array of push buttons of the telephone and to be secured in place thereover, said housing having a plate, said plate including an array of apertures extending therethrough, said plate having inner and outer faces;

a first array of finger discs corresponding to at least some of the telephone push buttons for actuating them and bearing indicia on the front faces of said discs, said discs normally at least partially extending outwardly from the outer face of said plate, said discs having rear faces on the opposite side of said front faces;

a series of elongated legs fixedly connected to said rear faces and slidably extending through said apertures to the telephone push buttons for actuating them selectively when depressed and alternatively maintaining said discs normally at least partially extending outwardly from the outer face of said plate, at least one of said legs having an axially-extending front portion disposed in axial alignment with its aperture in said plate and having a laterally extending intermediate portion connected at its forward end to said front portion and terminating in a foot portion adapted to engage one of the telephone push buttons;

logic circuit means mounted within said housing for performing mathematical calculations;

display means mounted on said housing and responsive to said logic circuit means for indicating information concerning said calculations;

first switching means mounted on said housing and responsive to said finger discs for causing the generation of input information for said logic circuit means;

a second array of finger discs bearing calculating indicia on the front faces thereof; and

second switching means mounted on said housing and responsive to said second array of finger discs for causing additional input information to be generated for said logic circuit means.

2. A calculator according to claim **1**, wherein each one of said apertures in said plate includes an enlarged portion for receiving its finger disc and a reduced diameter portion for reciprocatively receiving the forward portion of its leg, the intermediate and foot portions of said legs being disposed in back of said plate.

3. A calculator according to claim **2**, wherein the cross-sectional shape of said enlarged portions of said apertures are complementary-shaped relative to the cross-sectional shape of said discs, the complementary cross-sectional shapes of said enlarged portions and said discs causing said discs and said legs fixed thereto to resist axial rotation thereof.